

US ENVIRONMENTAL PROTECTION AGENCY REGION 10

January 2000

# Asarco Sediments and Groundwater **Proposed Plan**

The U. S. Environmental Protection Agency is inviting public comment on the Proposed Plan for the cleanup of the sediments and groundwater at the former Asarco Smelter Facility. This fact sheet summarizes the proposed cleanup alternatives. EPA would like your comments on the Preferred Alternatives as well as the other cleanup alternatives for this portion of the project.

Your comments will help EPA make a decision on a cleanup approach that is technically sound and addresses the concerns of the community and all other interested parties. After consideration of all comments, EPA will make the final decision for the cleanup remedy for the Asarco Sediments and Groundwater Operable Unit in a Record of Decision (ROD). EPA will respond in writing to all comments submitted during the public comment period in a document called a "Responsiveness Summary." This summary will be an attachment to the ROD and will be made available to the public for review. The ROD is due to be completed by June 2000.

Because all of the cleanups at the facility are related to one another and certain parts have to be completed before other parts can begin, you will see reference to other cleanups already underway and how they all fit together in the Proposed Plan. For a more detailed description of the cleanup alternatives and how all of the parts fit together, the full Proposed Plan can be reviewed at the information repositories listed at the end of this fact sheet or viewed through FPA's website.

# PUBLIC COMMENT PERIOD ON THE CLEANUP

January 26 through February 24, 2000

You are Invited to a Public Meeting February 10, 2000 7:00 p.m. to 9:00 p.m. Tacoma Yacht Club 5401 N. Waterfront Drive Tacoma, Washington

Oral comments can also be provided to EPA at the meeting.

Written Comments Must be Mailed by February 24, 2000. Send them to:

Lee Marshall, EPA Project Manager 1200 Sixth Avenue, MS/ECL-111 Seattle, WA 98101



#### **Groundwater Cleanup Alternatives**

EPA's preferred alternative for groundwater is to cap the former smelter facility to limit water from soaking into the ground, intercept groundwater at selected locations before it enters the facility, and treat the water before discharging it into Commencement Bay. EPA proposes to abandon or replace leaking underground sewer and water lines, monitor the facility long-term, and set institutional controls to restrict future use of the facility groundwater. If groundwater cleanup goals are not achieved, contingency actions, such as additional ways to re-route the groundwater, may be constructed. This alternative would cost \$38.4 million.

The other alternatives evaluated for groundwater cleanup include: no action, actively pump and treat, inject air into the groundwater, and inject seawater into the site.

#### **Sediment Cleanup Alternatives**

There are three different areas for sediment cleanup, the Nearshore/Offshore area, the Yacht Basin, and the Northshore area. Each of the areas is listed below with the preferred alternative as well as the other alternatives considered.

#### - Nearshore/Offshore Area (18 acres)

EPA's preferred cleanup alternative for the Nearshore/Offshore area is to cap 18 acres of contaminated sediments with a minimum of one meter (approximately three feet) of clean sand and gravel to prevent direct contact with people and marine life. This alternative would cost \$11.6 million.

The other alternatives evaluated for cleaning up the Nearshore/Offshore area include: no action, dredging with nearshore confinement in an underwater cell, and dredging with upland confinement.

#### - Yacht Basin Area (15 1/2 acres)

EPA's preferred cleanup alternative for the Yacht Basin area is to dredge 15 ½ acres of contaminated sediment to a depth of approximately two feet and place them under the upland cap in the central portion of the Asarco facility known as Crescent Park. If all of the contaminated sediments cannot be dredged or if the dredging hits slag, the remaining contaminated sediment area may be capped. This alternative would cost \$3.6 million.

The other alternatives evaluated for cleaning up the Yacht Basin area include: no action, natural recovery, and dredging with nearshore confinement in an underwater cell.

#### - Northshore Area (1 ½ acres)

EPA's preferred cleanup alternative for the Northshore area is to cap 1 ½ acres of contaminated sediments with a minimum of one meter (approximately 3 feet) of clean sand and gravel to prevent direct contact with people and marine life. This alternative would cost \$740,000.

The other alternatives evaluated for cleaning up the Northshore area include: no action, natural recovery, dredging with confinement in an underwater cell, and dredging with upland confinement.



#### **Evaluation Criteria**

In order to select a cleanup option, EPA uses nine criteria to evaluate the alternatives. They are listed below:

- overall protection of human health and the environment;
- compliance with federal and state environmental laws;
- reduction in toxicity, mobility and volume through treatment;
- short-term effectiveness:
- long-term effectiveness and permanence;
- implementability;
- cost:
- state and tribal acceptance; and
- community acceptance.

With the exception of the no action alternative, all alternatives must meet the first two criteria. EPA uses the next five criteria for comparing alternatives and selecting a preferred alternative. After public comment, EPA may change its preference on the basis of the last two criteria.

### **Summary**

EPA believes the combination of the preferred groundwater and sediments alternatives provides the best balance of tradeoffs among the alternatives with respect to the evaluation criteria and its compliances with requirements under the Superfund law. However, the preferred alternative can be changed in response to public comment or new information. For a more detailed description of the cleanup alternatives and how each remedy fits into the nine criteria, please review the full Proposed Plan.

## History of the Facility

From 1890 through 1912, the facility was used as a lead smelter and refinery. Asarco, Inc. purchased the property in 1905 and converted it in 1912 into a facility to smelt and refine copper from copperbearing ores and concentrates shipped from other locations. By-products of the smelting operations were further refined to produce other marketable products, such as arsenic, sulfuric acid, and liquid sulfur dioxide. Asarco stopped operating in 1985.

The smelting and refining operations at the facility have contaminated the soil, groundwater, surface water, and sediments. Metals (such as arsenic, copper, lead and zinc) were released into Commencement Bay through spills from loading and unloading ships. Surface water runoff, air emissions from the stack, slag fill to extend the shoreline, slag shoreline erosion, and groundwater transport also released these metals into the bay.

The facility was placed on the Superfund National Priorities List in 1983 and was originally studied as part of the Commencement Bay Nearshore/Tideflats Superfund site. Since then, Asarco has conducted numerous studies and cleanup activities at the facility under EPA's supervision. The upland cleanup is beginning before the sediment cleanup, to prevent the sediments from being recontaminated. As part of the upland cleanup, which began in 1994, all of the buildings and structures at the facility have been or will be demolished and the most contaminated material will be placed in an on-site containment facility (OCF) on the facility. Construction of the OCF began in 1999. Contaminated soil from nearby residential yards and public roadways is being removed and consolidated for containment under the cap on the facility.



# Where You Can Find Other Technical Documents

You can review other technical documents related to the Asarco Sediments and Groundwater Operable Unit at the information repositories listed below. You can also view the entire Proposed Plan on EPA's web page at http://www.epa.gov/r10earth. Scroll down to "calendar" at the bottom of the page, scroll to "Public Comment Opportunities," and click on any of the underlined titles to view the information. The Proposed Plan will be available by January 26, 2000.

Tacoma Main Public Library 1102 Tacoma Avenue South Northwest Room Tacoma, WA \*\*

U. S. Environmental Protection Agency 1200 Sixth Avenue 7<sup>th</sup> Floor Records Center Seattle, WA \*\*

Washington Department of Ecology 300 Desmond Drive SE Olympia, WA In addition, copies of the entire Proposed Plan will be at the following locations:

City of Tacoma
Environmental Commission
747 Market Street, Suite 1120
Tacoma, WA

Tacoma Pierce County Health Department 3629 South D Street Tacoma, WA

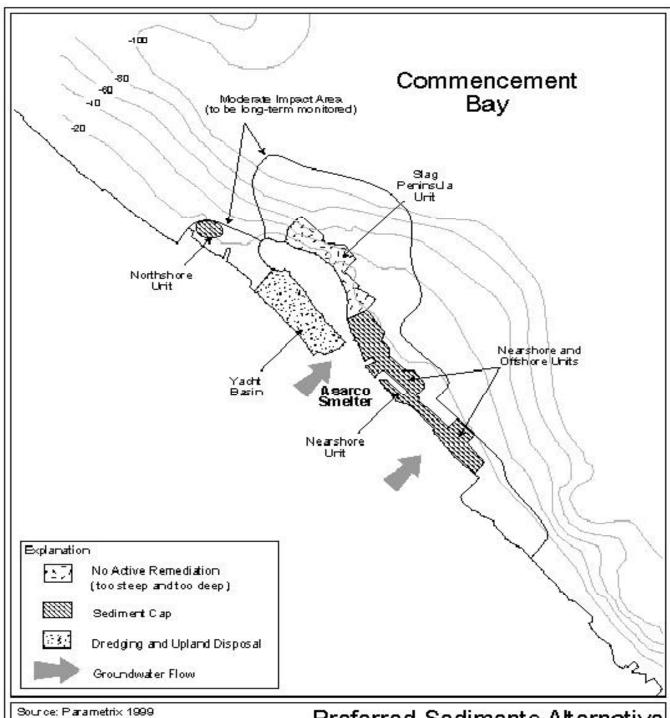
Ruston Town Hall 5117 Winnifred Ruston, WA

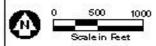
Asarco Information Center 5311 North Commercial Ruston, WA

Citizens for a Healthy Bay 917 Pacific Avenue Suite 406 Tacoma, WA

<sup>\*\*</sup> Indicates the locations of the full Administrative Record







Preferred Sediments Alternative Asarco Sediments/Groundwater OU



Figure

# FOR MORE INFORMATION:

If you have any questions or would like more information, please call Lee Marshall, EPA Project Manager (206) 553-2723, or Jeanne O'Dell, Community Involvement Coordinator (206) 553-6919 or toll free in Seattle at 1-800-424-4372.

To ensure effective communication with everyone, additional services can be made available to persons with disabilities by contacting one of the numbers above.



Region 10 (ECO-081) 1200 Sixth Avenue Seattle WA 98101